

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

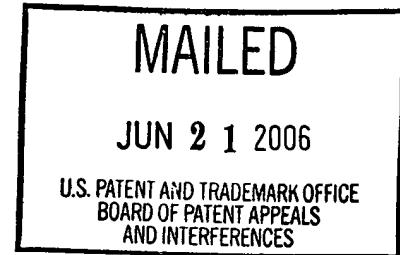
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte ROBERT A. WIEDEMAN and PRASHANT V. WAKNIS

Appeal No. 2006-0663  
Application No. 09/841,862

ON BRIEF



Before JERRY SMITH, RUGGIERO, and MACDONALD, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-7 and 14-20, which are all of the claims pending in this application.

The claimed invention relates to a mobile satellite telecommunications system and method in which at least one user terminal, at least one earth orbiting satellite, and at least one gateway, are provided. In response to requests from particular applications, individual ones of a plurality of Quality of Service (QoS) modes for servicing different application requirements are selected with the user terminal and communicated

to the gateway which is bidirectionally coupled to a data communications network. In a further embodiment, a path is selected, utilizing stored satellite ephemeris information, through a constellation of satellites to a destination gateway with a description of the selected path being transmitted from the user terminal to at least one of the constellation of satellites.

Claim 1 is illustrative of the invention and reads as follows:

1. A mobile satellite telecommunications system, comprising:
  - at least one user terminal;
  - at least one satellite in earth orbit; and
  - at least one gateway bidirectionally coupled to a data communications network;
  - said user terminal comprising a controller responsive to applications for selecting individual ones of a plurality of Quality of Service (QoS) modes for servicing different application requirements.

The Examiner relies on the following prior art:

|                            |           |                       |
|----------------------------|-----------|-----------------------|
| Wiedeman et al. (Wiedeman) | 5,655,005 | Aug. 05, 1997         |
| Roccanova                  | 6,522,658 | Feb. 18, 2003         |
|                            |           | (filed Jun. 07, 1999) |
| Forslow                    | 6,608,832 | Aug. 19, 2003         |
|                            |           | (filed Jul. 23, 1998) |

Claims 1-7 and 14-20 stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers Forslow in view of Roccanova with respect to claims 1-5 and 14-18, and adds Wiedeman to the basic combination with respect to claims 6, 7, 19, and 20.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Briefs<sup>1</sup> and Answer for their respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the Examiner and the evidence of obviousness relied upon by the Examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Briefs along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 1-7 and 14-20. Accordingly, we affirm.

As a general proposition in an appeal involving a rejection under 35 U.S.C. § 103, an Examiner is under a burden to make out a prima facie case of obviousness. If that burden is met, the burden of going forward then shifts to Appellants to overcome the

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<sup>1</sup> The Appeal Brief was filed July 18, 2005. In response to the Examiner's Answer mailed August 23, 2005, a Reply Brief was filed October 13, 2005 which was acknowledged and entered by the Examiner as indicated in the communication mailed November 3, 2005.

prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976).

With respect to independent claims 1 and 14, Appellants' arguments in response to the Examiner's 35 U.S.C. § 103(a) rejection assert a failure to establish a prima facie case of obviousness since all of the claimed limitations are not taught or suggested by the applied prior art references. After careful review of the disclosures of Forslow and Roccanova in light of the arguments of record, we are in general agreement with the Examiner's position as stated in the Answer.

Initially, we agree with the Examiner (Answer, page 7) that, Appellants' argument (Brief, pages 5 and 6; Reply Brief, pages 2 and 3) to the contrary notwithstanding, the ordinarily skilled artisan would have recognized that the mobile station (102, Figure 9) of Forslow would correspond to the claimed "user terminal," particularly in view of the fact that Appellants have provided no specific definition of the terminology in their

specification. As pointed out by the Examiner (id.), the mobile station of Forslow enables a user to connect to the data communications network utilizing the various programs running on the mobile station.

We also find to be unpersuasive Appellants' contention (Brief, pages 5 and 6; Reply Brief, pages 3-5) that, in contrast to the Examiner's assertion, Forslow lacks a disclosure of a bidirectionally coupled data communications network gateway, as well as a controller for selecting quality of service (QoS) modes, as claimed. In our view, the illustration of gateway 116 in Forslow's Figure 9, as well as the information flow depicted in the flow charts of Forslow's Figures 10-13, supports the Examiner's position. In addition, we find that the accompanying description beginning at column 14, line 25 of Forslow, which indicates that the gateway 116 enables communication among the various entities on the network, further establishes that such gateway is bidirectionally coupled. Similarly, we fail to see why Forslow's user terminal mapper (107, Figure 9, column 14, lines 51-54), which selects the network and network bearers, i.e., circuit-switched or packet-switched, based on quality of service considerations, would not be considered a "controller" as claimed.

We further find to be without merit Appellants' argument (Brief, pages 7 and 8; Reply Brief, pages 5 and 6) that the Examiner has not established proper motivation for the proposed combination of Forslow and Roccanova. Initially, we would point out that, contrary to Appellants' contention, Roccanova is clearly involved with a mobile system as discussed, for example, at column 3, lines 6-11. Further we find ample motivation, for all of the reasons articulated by the Examiner (Answer, pages 3, 4, 10, and 11), for the combination of Roccanova with Forslow. In our view, the ordinarily skilled artisan would have recognized and appreciated that the system of Roccanova, which employs quality of service determinations in a mobile satellite communications environment, would serve as an obvious enhancement to the system of Forslow, especially in view of the fact that Forslow contemplates (column 8, lines 58-63) implementation of the disclosed invention "in any mobile communications system using other mobile data communications architectures and/or protocols."

For the above reasons, since it is our opinion that the Examiner's prima facie case of obviousness has not been overcome by any convincing arguments from Appellants, the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1 and 14 is sustained.

We also make the observation, from our own independent review of the disclosure of Roccanova, that, as also alluded to by the Examiner (Answer, pages 11 and 12), Roccanova discloses a user terminal 12, a bidirectional gateway 14 coupled to a data communications network, and a controller (modulator 36) in the user terminal which makes a selection of quality service modes. In addition, the system of Roccanova establishes communications with at least one satellite (16, 18) in earth orbit.

In view of the above discussion and analysis of the disclosure of the Roccanova reference, it is our opinion that, although we found no error in the Examiner's proposed combination of Forslow and Roccanova as discussed supra, the Forslow reference is not necessary for a proper rejection of at least claims 1 and 14 since all of the claimed elements are in fact present in the disclosure of Roccanova. A disclosure that anticipates under 35 U.S.C. § 102 also renders the claim unpatentable under 35 U.S.C. § 103, for "anticipation is the epitome of obviousness." Jones v. Hardy, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed. Cir. 1984). See also In re Fracalossi, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); In re Pearson, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974).

Turning to a consideration of the Examiner's obviousness rejection of dependent claims 2-5 and 15-18 based on the

combination of Forslow and Rocanova, we sustain this rejection as well. With respect to claims 2, 5, 15, and 18, we agree with the Examiner (Answer, page 12) that the transmission of the indication of the selected QoS mode by the mapper controller 107 in Forslow to the gateway can be reasonably interpreted as a "request" for the establishment of the connection, i.e., packet switched (114, Figure 9) or circuit-switched (110, Figure 9) as claimed.

Similarly, we find ample support in Forslow for the Examiner's position that Forslow discloses the feature of higher user charges for higher quality QoS as broadly set forth in dependent claims 3 and 16. As pointed out by the Examiner (Answer, pages 4, 13, and 14), Forslow discloses (column 1, lines 60-62) that users are charged based on the quality of the service of the transmission as well as implicitly indicating (column 17, line 66) the low cost of packet-switched communications relative to circuit-switched transmission.

With respect to dependent claims 4 and 17, we find no error in the Examiner's assertion (Answer, page 4) that the quality of service modes discussed at column 5, lines 1-10 and column 1, lines 48-51 of Forslow correspond to those enumerated in the claims. In particular, we find compelling evidence, i.e., excerpts from Newton's Telecom Dictionary, presented by the

Examiner (Answer, pages 14 and 15) in support of the asserted position with no evidence or argument, aside from a generalized statement of disagreement (Reply Brief, pages 8 and 9) with the Examiner's position, forthcoming from Appellants.

We also sustain the Examiner's 35 U.S.C. § 103(a) rejection of claims 6, 7, 19, and 20 in which the Wiedeman reference is added to the combination of Forslow and Roccanova to address the "satellite ephemeris information" feature of these claims. We agree with the Examiner that the ordinarily skilled artisan would have been motivated and found it obvious to utilize stored satellite ephemeris information in the system of Forslow as modified by the satellite communication disclosure of Roccanova to establish an optimum path through a satellite constellation as taught by Wiedeman. Although Appellants contend (Brief, 13; Reply Brief, page 9) that Wiedeman does not disclose a satellite path determination using ephemeris information as claimed, we fail to see how any other conclusion can be drawn from the disclosure of Wiedeman. For example, Wiedeman discloses (column 3, lines 12-26) that the linking, i.e., the communication path, of satellites, the transceiver apparatus, i.e., the user terminal, and the terrestrial communications link, i.e., the gateway, is determined based on satellite ephemeris information.

In summary, we have sustained the Examiner's 35 U.S.C.

§ 103(a) rejection of all of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-7 and 14-20 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (effective September 13, 2004).

AFFIRMED

*Jerry Smith* )  
Jerry Smith )  
Administrative Patent Judge )  
 )  
*Joseph F. Ruggiero* ) BOARD OF PATENT  
Joseph F. Ruggiero )  
Administrative Patent Judge )  
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*Allen R. MacDonald* ) APPEALS AND  
Allen R. MacDonald )  
Administrative Patent Judge )  
 )  
 ) INTERFERENCES  
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JFR/eld

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Karambelas & Associates  
655 Deep Valley Drive, Suite 303  
Rolling Hills Estates, CA 90274